

Message

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**From:** Fernandez, Antonio [fernandez.antonio@epa.gov]  
**Sent:** 12/18/2017 3:55:36 PM  
**To:** Charmley, William [charmley.william@epa.gov]  
**CC:** Olechiw, Michael [olechiw.michael@epa.gov]  
**Subject:** RE: ACTION: From NY Times: Press Inquiry about Fuel: ethanol, RFS, fuel efficiency

Bill,  
I am available anytime you have a slot.

Linc pulled me into this response to Erin on Friday after Dave Good partially responded but didn't answer the specific reporter question. This is what I E-mailed Linc and Erin:

# Deliberative Process / Ex. 5

Tony

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**From:** Charmley, William  
**Sent:** Monday, December 18, 2017 10:47 AM  
**To:** Fernandez, Antonio <fernandez.antonio@epa.gov>  
**Cc:** Olechiw, Michael <olechiw.michael@epa.gov>  
**Subject:** FW: ACTION: From NY Times: Press Inquiry about Fuel: ethanol, RFS, fuel efficiency

Tony –

Can you read this, and we can get together to discuss around 12:15 or 12:30 today?

Thanks  
Bill

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**From:** Birgfeld, Erin  
**Sent:** Monday, December 18, 2017 10:09 AM  
**To:** Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Charmley, William <charmley.william@epa.gov>  
**Cc:** Sutton, Tia <sutton.tia@epa.gov>  
**Subject:** RE: ACTION: From NY Times: Press Inquiry about Fuel: ethanol, RFS, fuel efficiency

Hi Bill and Ben,

Sorry to bother this with you again but NYT is pinging us for an answer to this follow up question.

Thanks,  
Erin

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**From:** Birgfeld, Erin  
**Sent:** Friday, December 15, 2017 3:04 PM  
**To:** Hengst, Benjamin <Hengst.Benjamin@epa.gov>; Charmley, William <charmley.william@epa.gov>  
**Cc:** Sutton, Tia <sutton.tia@epa.gov>  
**Subject:** RE: ACTION: From NY Times: Press Inquiry about Fuel: ethanol, RFS, fuel efficiency

Hi Bill,

We got an inquiry from the Eric Taub of the NYT yesterday which I'd like to bring you up to speed on and to which we'd like your input on his follow up question. The inquiry is essentially about the type of fuels and octane level that EPA requires/allows for fuel economy testing purposes. CD provided the response that we sent yesterday.

The follow up question from the reporter that we are grappling with at the moment is this:

"One thing is not clear: can a test use High octane if the vehicle doesn't require it AND the test is for fuel economy NOT for emissions?"

# Deliberative Process / Ex. 5

**The initial NYT question and response from the CD team is here for reference and background:**

**Initial NYT Inquiry:** I'd like to know if a vehicle manufacturer, when testing a model for fuel efficiency standards, needs to use a specific octane grade of fuel in the tests. For example if one vehicle only "recommends" as opposed to "requires" 91 octane fuel, can they use 87 octane in the test? Similarly if a vehicle says only 87 octane fuel is required, can they use 91 octane fuel, as a way perhaps to boost their stated fuel economy numbers? As I mentioned I'm also considering expanding my piece to include a general précis as to how fuel efficiency is tested in general, but we can talk about that in the coming days.

**Response (already provided):**

**Tailpipe and Evaporative Emission Testing** - Although EPA used to test light-duty gasoline-fueled vehicles using EPA unleaded gasoline or California Phase II test fuel (neither of which contains ethanol), the final rule for Tier 3 emission

standards updated the federal emissions test fuel to contain E10 to better match today's in-use gasoline. The Tier 3 requirements went into effect beginning with the 2017 model year vehicles and are being phased in from 2017 to 2019 model years. Beginning with the 2020 model year, almost all gasoline vehicles will be tested for emissions on Tier 3 or LEV3 (E10) gasoline. The Tier 3 test fuel specifications, which can be found at 40 CFR 86.113 and 40 CFR 1065.710(a) (Table 1), apply to Tier 3 new vehicle certification, assembly line, and in-use testing. For more information about EPA's Tier 3 emission requirements, please visit <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-control-air-pollution-motor-vehicles-tier-3>.

**Fuel Economy Testing** - Although Tier 3 vehicles are required to be tested on E10 test fuel for tailpipe and evaporative emissions beginning with the 2017 model year, EPA has not yet developed procedures to calculate fuel economy (mpg) values for vehicles tested on E10 test fuel. EPA is currently working on a rulemaking which will propose regulations to calculate fuel economy (mpg) values for vehicles tested on E10 test fuel. Thus, we expect that E10 test fuel will soon be required for fuel economy testing (similar to EPA Tier 3 emission testing requirements), e.g. beginning with 2020 model year vehicles.

For fuel economy testing, EPA's test fuel for light-duty gasoline-fueled vehicles does not currently contain ethanol or other oxygenates. However, EPA does account for the impact of low-level ethanol blends in our fuel economy estimates. Ethanol has a lower energy density than gasoline—about 1/3 less energy per gallon. That means a car operating on E10 (10 percent ethanol and 90 percent gasoline) would require about 3 percent more fuel to travel one mile than a car operating on gasoline and thus have about 3 percent lower fuel economy. EPA adjusts the fuel economy label estimates downward by about 10-15 percent (city) and 25-30 percent (highway) to account for a variety of factors that are not currently accounted for during laboratory fuel economy testing, such as tire under-inflation, wind, hills, vehicle speeds and road conditions. It also includes a 1.5 percent downward adjustment to account for the average national ethanol content.

Vehicles that are going to be sold in California or States that have adopted California emission standards must be certified to meet California's emission standards. The Vehicle Emissions Control Information (VECI) label, found under the hood of all cars and light-trucks, will list if the vehicle is certified to meet California emission standards.) Vehicles certified to meet California LEV3 emission standards for 2015 to 2025 model years are required to be tested for tailpipe emissions using E10 test fuel. (For more information, please visit [www.arb.ca.gov/msprog/levprog/leviii/leviii.htm](http://www.arb.ca.gov/msprog/levprog/leviii/leviii.htm).)

**Octane Requirements of EPA Test Fuel** – Prior to 2017 model year, EPA emission and fuel economy testing was performed on E0 high octane gasoline test fuel.

**For Emission Testing:** Beginning with the 2017 model year (and being phased in from 2017 to 2019 model years), EPA emission testing will be performed on Tier 3 E10 low octane or California LEV3 E10 low octane gasoline test fuel. High octane E10 gasoline test fuel may be used for emission testing only for vehicles which the manufacturer conditions the vehicle warranty on the use of high octane (premium grade) gasoline.

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**From:** Good, David

**Sent:** Friday, December 15, 2017 11:38 AM

**To:** Birgfeld, Erin <[Erin.Birgfeld@epa.gov](mailto:Erin.Birgfeld@epa.gov)>; Wehrly, Linc <[linc.wehrly@epa.gov](mailto:linc.wehrly@epa.gov)>

**Cc:** Mylan, Christopher <[Christopher.Mylan@epa.gov](mailto:Christopher.Mylan@epa.gov)>; Cohen, Janet <[Janet.Cohen@epa.gov](mailto:Janet.Cohen@epa.gov)>

**Subject:** RE: ACTION: From NY Times: Press Inquiry about Fuel: ethanol, RFS, fuel efficiency

Erin,

# Deliberative Process / Ex. 5

# Deliberative Process / Ex. 5

Dave

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**From:** Birgfeld, Erin  
**Sent:** Friday, December 15, 2017 10:18 AM  
**To:** Good, David <[good.david@epa.gov](mailto:good.david@epa.gov)>; Wehrly, Linc <[wehrly.linc@epa.gov](mailto:wehrly.linc@epa.gov)>  
**Cc:** Mylan, Christopher <[Mylan.Christopher@epa.gov](mailto:Mylan.Christopher@epa.gov)>; Cohen, Janet <[cohen.janet@epa.gov](mailto:cohen.janet@epa.gov)>  
**Subject:** FW: ACTION: From NY Times: Press Inquiry about Fuel: ethanol, RFS, fuel efficiency  
**Importance:** High

Hi Dave and Linc,

The NYT has one follow up question on this one. If you could help we'd appreciate it!

"One thing not clear: can a test use  
High octane if the vehicle doesn't require it AND the test is for fuel economy NOT for emissions?"

Thank you!

-Erin

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**From:** Jones, Enesta  
**Sent:** Thursday, December 14, 2017 5:51 PM  
**To:** Millett, John <[Millett.John@epa.gov](mailto:Millett.John@epa.gov)>; Birgfeld, Erin <[Birgfeld.Erin@epa.gov](mailto:Birgfeld.Erin@epa.gov)>; Mylan, Christopher <[Mylan.Christopher@epa.gov](mailto:Mylan.Christopher@epa.gov)>  
**Cc:** Jones, Enesta <[Jones.Enesta@epa.gov](mailto:Jones.Enesta@epa.gov)>  
**Subject:** ACTION: From NY Times: Press Inquiry about Fuel: ethanol, RFS, fuel efficiency

Hi All, can you help with his follow-up?

Thanks. One thing not clear: can a test use  
High octane if the vehicle doesn't require it AND the test is for fuel economy NOT for emissions?

Hi Eric, attributable to an EPA spokesperson:

**Tailpipe and Evaporative Emission Testing** - Although EPA used to test light-duty gasoline-fueled vehicles using EPA unleaded gasoline or California Phase II test fuel (neither of which contains ethanol), the final rule for Tier 3 emission standards updated the federal emissions test fuel to contain E10 to better match today's in-use gasoline. The Tier 3

requirements went into effect beginning with the 2017 model year vehicles and are being phased in from 2017 to 2019 model years. Beginning with the 2020 model year, almost all gasoline vehicles will be tested for emissions on Tier 3 or LEV3 (E10) gasoline. The Tier 3 test fuel specifications, which can be found at 40 CFR 86.113 and 40 CFR 1065.710(a) (Table 1), apply to Tier 3 new vehicle certification, assembly line, and in-use testing. For more information about EPA's Tier 3 emission requirements, please visit <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-control-air-pollution-motor-vehicles-tier-3>.

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**From:** Eric Taub [<mailto:eric@taub.com>]

**Sent:** Monday, December 11, 2017 2:39 PM

**To:** Daguiard, Robert <[Daguiard.Robert@epa.gov](mailto:Daguiard.Robert@epa.gov)>

**Subject:** From NY Times: Press Inquiry about Fuel: ethanol, RFS, fuel efficiency

Hello Robert,

Further to our brief chat, I'd like to know if a vehicle manufacturer, when testing a model for fuel efficiency standards, needs to use a specific octane grade of fuel in the tests.

For example if one vehicle only "recommends" as opposed to "requires" 91 octane fuel, can they use 87 octane in the test?

Similarly if a vehicle says only 87 octane fuel is required, can they use 91 octane fuel, as a way perhaps to boost their stated fuel economy numbers?

As I mentioned I'm also considering expanding my piece to include a general précis as to how fuel efficiency is tested in general, but we can talk about that in the coming days.

Thanks,  
Eric Taub  
NY Times  
Eric Taub

<image001.jpg>

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cell: Ex. 6 - Personal Privacy